

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-60. (Cancelled)

61. (Currently Amended) A method for manufacturing a coated circular substrate, comprising

- (a) providing a circular area with a radius in a sputtering chamber
- (b) introducing into said sputtering chamber one substrate of said radius or more than one substrate defining in combination an area of said radius;
- (c) rotating said at least one substrate about a first central axis of said circular area;
- (d) providing a single magnetron sputtering source with a circular sputtering surface and having a second central axis oblique with respect to and intersecting said first central axis;
- (e) selecting the diameter of said circular area to be larger than the diameter of said circular sputtering surface;
- (f) selecting an intersection angle of said first and second central axis to be:

$$43^\circ \leq \beta \leq 50^\circ; \text{ and}$$

- (g) magnetron sputter coating said at least one substrate by said single magnetron sputtering source.

62. (Original) The method of claim 61, further comprising selecting said intersection angle β to be approximately 45° .

63. (Original) The method of claim 61, further comprising generating with said single magnetron sputtering source at least one circular erosion ditch in said sputtering surface, said erosion ditch having a circular locus r_{Tr} wherein said second central axis intersects said at least one substrate at a distance D from said sputter surface, and selecting r_{Tr} to be

$$1/4 \leq r_{Tr} / D \leq 2/3.$$

64. (Original) The method of claim 61, wherein said circular sputtering surface has a diameter Φ_T and said second central axis intersects said at least one substrate at a distance D from said sputtering surface, further comprising selecting Φ_T to be:

$$3/4 \leq \Phi_T / D \leq 2.$$

65. (Currently Amended) The method of claim ~~[[61]]~~64, further comprising selecting Φ_T to be $\approx 1.2 D$.

66. (Currently Amended) The method of claim 61, wherein said circular area has a diameter Φ_S , and said second central axis intersects said at least one substrate at a distance D from said sputtering surface, further comprising selecting Φ_S to be:

$$\Phi_S/4 D \leq 1.8. \quad \Phi_S/4 D \leq 1.8.$$

67. (Original) The method of claim 61, wherein said circular area has a diameter Φ_S , and said circular sputtering surface has a diameter Φ_T , further comprising selecting Φ_T to be:

$$1 \leq \Phi_S / \Phi_T \leq 2.4.$$

68. (Original) The method of claim 61, wherein said circular area has a diameter of Φ_S selected to be:

$$50 \text{ mm} \leq \Phi_S \leq 400 \text{ mm}.$$

69. (Original) The method of claim 68, wherein Φ_S is selected to be:

$$50 \text{ mm} \leq \Phi_S \leq 300 \text{ mm}.$$

70. (Original) The method of claim 61, wherein said at least one substrate is one of a data storage disc and of a wafer.

71. (Original) The method of claim 61, wherein said at least one substrate has a diameter of one of 64 mm, 120 mm, 160 mm, 240 mm.